

Date: Monday, 11/6/2006 2:40:19 PM  
User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206/OH-58 SADDLE, INBOARD, RIGHT SIDE
Job Number	: 29350	Part Number	: D29392
Estimate Number	: 10937	Drawing Number	: D2939 REV B
P.O. Number	: <i>N/A</i>	Project Number	: N/A
This Issue	: 11/6/2006 S.O. No. : <i>N/A</i>	Drawing Revision	: B
Prsht Rev.	: NC	Material	: <i>N/A</i>
First Issue	: <i>N/A</i> Type : MACHINED PARTS	Due Date	: 11/24/2006 Qty: 10 Um: Each
Previous Run*	: 28864		
Written By	: <i>[Signature]</i>		
Checked & Approved By	: <i>[Signature]</i>		
Comment	: Est: B 00.06.26 New DWG rev (mpp 2069) EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101001	7075-T7351 2X6X6.25
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)  
Issue material from stock: 7075-T7351 (QQ-A-250/12)  
Cut Size 2.0" x 6.25" X 6.00" Grain Along 6.00" Length

Batch No: *B25343**and 06/11/10**10*

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

Program part number and batch number.

1-Inspect part number and batch number are programmed correctly.

2-Machine Step No 1 of Folio and visually inspect as per dwg D2939 &amp; attached Dimension Sheet

3-Machine Step No 2 of Folio and visually inspect as per dwg D2939 &amp; attached Dimension Sheet

4-Machine Step No 3 of Folio and visually inspect as per dwg D2939 &amp; attached Dimension Sheet

5-Deburr

*and 06/11/10**10*

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE

Machine Keyway and inspect per attached dimension sheet

*and 06/11/12**10*

4.0	QC1	INSPECT ALL DIM TO DIM SHEET
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Comment: INSPECT ALL DIM TO DIM SHEET

*and 06/11/10**10*

5.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

*and 06/11/22*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ \_\_\_\_\_ Date: 06/12/04  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/11/10	Z	TOOL RAD FOR FLANGE POCKETING IS R0.188 INSTEAD OF R0.25 R0.30	UP 06/11/10 PL QSI 012	R0.188 IS ACCEPTABLE DWG WILL BE UPDATED TO SAY R0.188	SD 06/11/10	06/11/10	UP 06/11/10 PL QSI 018	2 06/11/10

NOTE: Date & initial all entries

Date: Monday, 11/6/2006 2:40:20 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206/OH-58 SADDLE, INBOARD, RIGHT SIDE

Job Number: 29350

Part Number: D29392

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

*a.m. 06/11/27*

*(10)*

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*a.m. 06/11/30*

*(10)*

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

*06/11/01 (10)*

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

*57471*

*06/11/01 (10)*

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*06/12/04 (15)*

Job Completion



*06/12/04*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	29350
<b>Description:</b> 206 Saddle, Inboard, Right side	<b>Part Number:</b>	D2939-2
<b>Inspection Dwg:</b> D2939 Rev. B		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2939 Rev. B and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.100	0.140		.121	.122	.120	.121		
B	0.100	0.140		.121	.120	.119	.120		
C	0.100	0.140		.119	.118	.122	.121		
D	0.210	0.230		.220	.221	.220	.220		
E	1.245	1.255		1.250	1.250	1.250	1.250		
F	1.245	1.255		1.250	1.250	1.250	1.250		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		0.512	0.511	0.511	0.511		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.497	2.498	2.498	2.498		
K	0.257	0.262	<del>DT8688</del>	.258	.258	.258	.258		
L	0.312	0.317	<del>DT8686</del>	.314	.314	.314	.314		
M	0.235	0.240		0.238	0.237	0.237	0.238		
N	0.100	0.140		.119	.120	.119	.119		
O	0.540	0.560		.552	.532	.551	.551		
P	0.490	0.510		.498	.500	.496	.498		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.742	2.742	2.742	2.742		
S	0.240	0.270		.249	.249	.250	.248		
T	0.100	0.180		.140	.140	.140	.140		
U	1.625	1.635		1.630	1.630	1.630	1.630		
V	1.362	1.372		1.367	1.367	1.367	1.367		
W	0.316	0.321	<del>DT8690</del>	.319	.319	.319	.319		
X	1.250	1.270		1.258	1.260	1.259	1.2595		
Y	1.565	1.585	<del>DT8695 A/B</del>	1.565	1.566	1.566	1.567		
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by:	SD
Date:	06/11/09

Audited by:	SL
Date:	06/11/22

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	#

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	29350
<b>Description:</b> 206 Saddle, Inboard, Right side	<b>Part Number:</b>	D2939-2
<b>Inspection Dwg:</b> D2939 Rev. B		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2939 Rev. B and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.100	0.140		.121	.121	.120	0.127		
B	0.100	0.140		.119	.115	.120	0.125		
C	0.100	0.140		.121	.121	.120	0.120		
D	0.210	0.230		.220	.220	.220	0.219		
E	1.245	1.255		1.258	1.258	1.258	1.249		
F	1.245	1.255		1.258	1.258	1.258	1.250		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		0.513	0.513	0.513	0.511		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.498	2.498	2.499	2.500		
K	0.257	0.262	<del>DT8683</del>	.258	.258	.258	0.258		
L	0.312	0.317	<del>DT8686</del>	.314	.314	.314	0.314		
M	0.235	0.240		0.239	0.238	0.238	0.238		
N	0.100	0.140		.119	.115	.119	0.119		
O	0.540	0.560		.552	.552	.551	0.554		
P	0.490	0.510		.508	.508	.499	0.506		
Q	3.715	3.725		3.720	3.720	3.720	3.718		
R	2.720	2.760		2.742	2.742	2.742	2.743		
S	0.240	0.270		.249	.248	.250	.251		
T	0.100	0.180		.140	.140	.140	0.140		
U	1.625	1.635		1.638	1.630	1.630	1.630		
V	1.362	1.372		1.368	1.368	1.367	1.367		
W	0.316	0.321	<del>DT8690</del>	.319	.319	.319	0.320		
X	1.250	1.270		1.260	1.259	1.259	1.2595		
Y	1.565	1.585	<del>DT8695 A/B</del>	1.566	1.567	1.566	1.565		
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by:	SA 19ml
Date:	06.11.10

Audited by:	J.L
Date:	06/11/22

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	#

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	29350
<b>Description:</b> 206 Saddle, Inboard, Right side	<b>Part Number:</b>	D2939-2
<b>Inspection Dwg:</b> D2939 Rev. B		Page 1 of 1

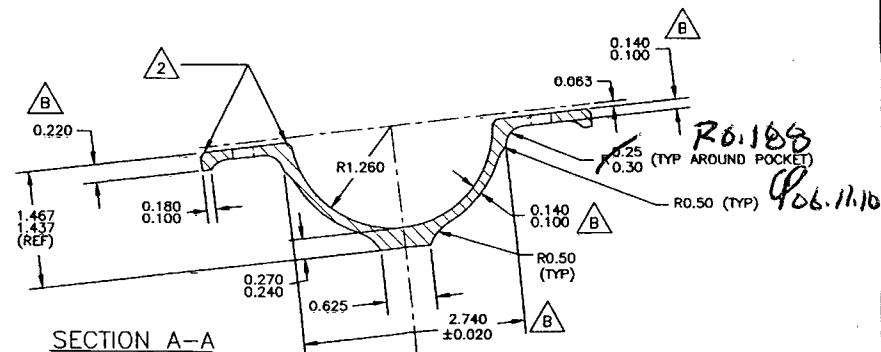
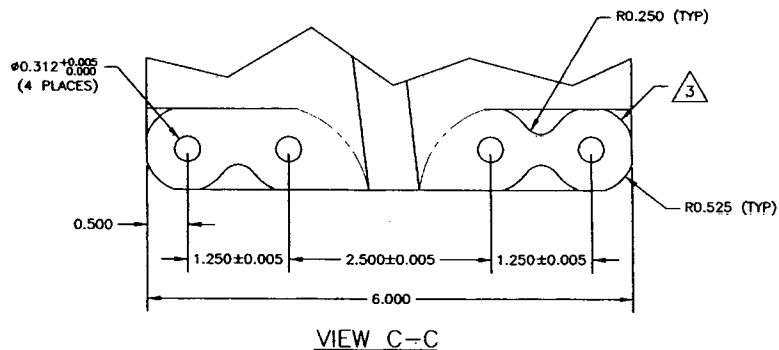
Inspect dimensions highlighted on inspection sheet drawing D2939 Rev. B and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.100	0.140		0.127	0.125				
B	0.100	0.140		0.124	0.128				
C	0.100	0.140		0.124	0.121				
D	0.210	0.230		0.219	0.219				
E	1.245	1.255		1.250	1.249				
F	1.245	1.255		1.250	1.250				
G	2.495	2.505		2.500	2.500				
H	0.510	0.515		0.512	0.512				
I	1.572	1.582		1.577	1.577				
J	2.495	2.505		2.500	2.500				
K	0.257	0.262	<del>DT8683</del>	0.258	0.258				
L	0.312	0.317	<del>DT8686</del>	0.314	0.314				
M	0.235	0.240		0.237	0.237				
N	0.100	0.140		0.119	0.119				
O	0.540	0.560		0.553	0.553				
P	0.490	0.510		0.504	0.504				
Q	3.715	3.725		3.718	3.720				
R	2.720	2.760		2.741	2.741				
S	0.240	0.270		0.251	0.251				
T	0.100	0.180		0.140	0.140				
U	1.625	1.635		1.628	1.628				
V	1.362	1.372		1.366	1.366				
W	0.316	0.321	<del>DT8690</del>	0.320	0.320				
X	1.250	1.270		1.255	1.260				
Y	1.565	1.585	DT8695 A/B	1.565	1.565				
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by:	JNL
Date:	06/11/11

Audited by:	J.L.
Date:	06/11/22

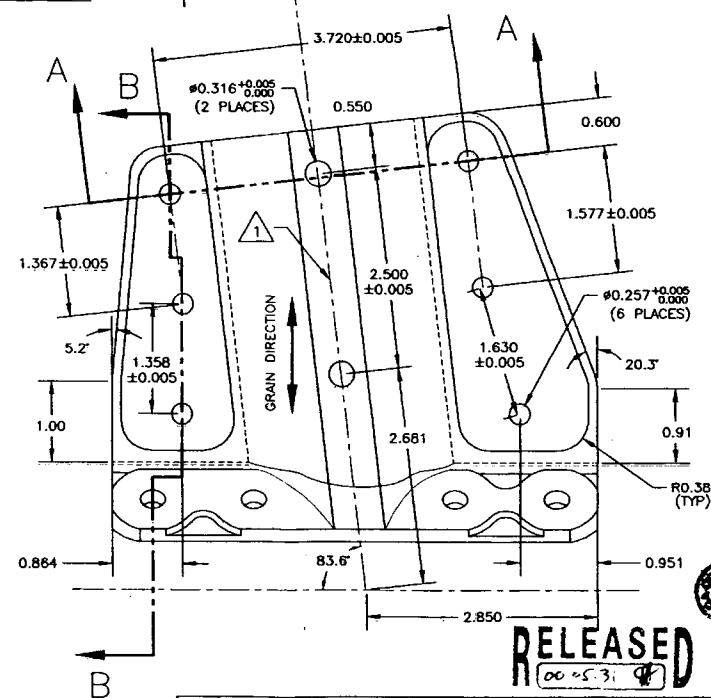
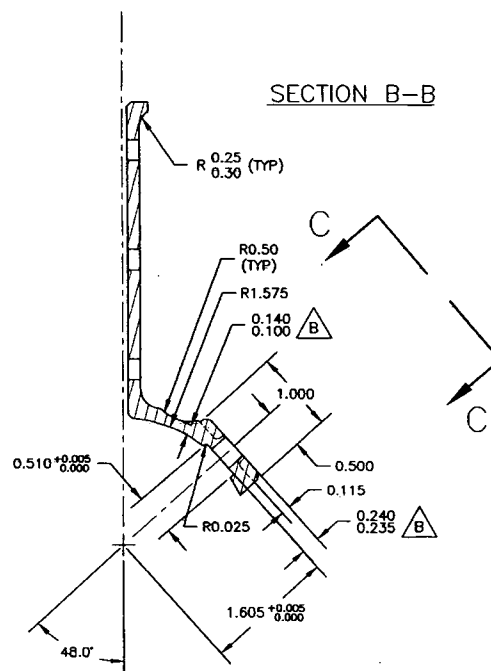
Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	



D2939-1 LH SADDLE (SHOWN)  
D2939-2 RH SADDLE (OPPOSITE)

MATERIAL: 7075-T7351 (QQ-A-250/12)  
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP
- 2 CHAMFER 0.050" x 45° AROUND THIS SURFACE (TYP 2 PLACES)
- 3 CHAMFER 0.050" x 45°



RELEASED  
00-5-31

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B	00.05.29	CHANGED DEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	DRAWN BY	<b>DART</b> DART AEROSPACE USA, INC. BELLEVUE, WA
CHECKED	APPROVED	DRAWING NO. D2939
DATE	00.05.29	TITLE SADDLE INSIDE
		REV. B SHEET 1 OF 1 SCALE 2:3

NO. 1  
UNDER REVIEW  
WORK ORDER 21350  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
UNCONTROLLED COPY  
ENGINEERING  
RETURN TO  
SHOP COPY  
21350



## Chris Provencal

---

**From:** David Shepherd [dshepherd@dartaero.com]  
**Sent:** October 19, 2006 3:31 PM  
**To:** 'S Shahbazian'  
**Cc:** 'Provencal, Chris'; 'Charbonneau, Eric'  
**Subject:** RE: Radius dimension on the saddle

Change the drawings. I guess we will also change the 0.313 crosstube hole dimensions as well.  
See D2661 to D2668 as well as D2932 to D2933.

David

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**From:** S Shahbazian [mailto:sshahbazian@dartaero.com]  
**Sent:** Thursday, October 19, 2006 1:16 PM  
**To:** Shepherd, David  
**Cc:** Provencal, Chris; Charbonneau, Eric  
**Subject:** Radius dimension on the saddle

Dave,  
On attach saddle drawing, according to Eric the marked-up radius that reads 0.30 and 0.25, should be 0.188 since the tooling has been changed long time ago, and apparently they have been machining those radiuses to 0.188 for a while. Do you see a problem with that? if not I will go ahead and change the drawing to reflect the changes.

Serge

--  
No virus found in this incoming message.  
Checked by AVG Free Edition.  
Version: 7.1.408 / Virus Database: 268.13.7/488 - Release Date: 10/19/2006

--  
No virus found in this outgoing message.  
Checked by AVG Free Edition.  
Version: 7.1.408 / Virus Database: 268.13.7/488 - Release Date: 10/19/2006

10/11/2006